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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,919	04/09/2001	Marc Herrmann	T3264-906756	5817
181	7590	03/08/2006	EXAMINER	
MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			THOMPSON, MARC D	
			ART UNIT	PAPER NUMBER
			2144	
DATE MAILED: 03/08/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/735,919

Applicant(s)

HERRMANN ET AL.

Examiner

Marc D. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-22 and 24-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-22 and 24-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This application has been reassigned to a new Examiner. See Conclusion section below, for new Examiner contact information.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/2005, per the order for RCE made on 12/19/2005, has been entered.
3. Claims 15-22 and 24-35 remain pending.

#### ***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
5. The effective filing date for the subject matter defined in the pending claims in this application is 12/16/1999.

#### ***Drawings***

6. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because it is unclear which drawings of those previously submitted on 8/8/2001 are

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associated with this application. The specification calls for two (2) figures, there are four (4) drawings/figures on this submission, and there is at least one figure with no numerical designation, and a drawing labeled "Fig. 3". New drawings are required to define which drawings specifically relate to the presented application.

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

### *Specification*

7. The 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112,

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first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: E<sup>2</sup>PROM (Page 5, Line 27), description of listed elements in regard to Figure 2 (Page 10, Lines 15-26), and the entirety of the paragraph at Page 13, Lines 1-6.

8. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because of the lack of a full specification currently in the (electronic) file wrapper as a whole. Various portions of the specification are evident (including, as originally filed 12/14/2000, and amendments to the specification, received 4/9/2001), but a complete copy of the specification can only be presumed. Further, the specification requires headings for each section pursuant to 37 CFR 1.77.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

9. The specification must properly identify copending application 09/736,304, should it issue as a patent as expected. It is noted this related application has been allowed, and it is presumed patent identification, printing, and coverage is forthcoming. Should this application

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mature into a patent, this must be reflected in the specification prior to allowance of the instant application.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 15-22, and 24-35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-45 of copending Application No. 09/736,304. This is a provisional obviousness-type double patenting rejection.

12. These two applications have very similar claims, resulting from an amendment of the 09/736,304 claimed invention. In fact, it appears that many of the instant claims are broader than the claims presented in the 09/736,304 application, are therefore anticipated, and would constitute an improper time extension of claim coverage should the claims of the copending application be patented, and the presently considered claims be allowed. It is noted the copending application 09/736,304 has been allowed, and so it is presumed that publication of these copending claims as a patent will occur prior to any publication of the currently presented claims.

***Claim Interpretation***

13. Before any construction of the claims occur, it is essential that the terms in the claim(s) be clearly defined. Here are the definitions which the Examiner has determined to be most reasonable for important terms in the claims. In light of the overly broad and nebulous disclosure, these definitions will be relied on to properly understand what is being claimed.

1. Agent: an autonomous process performing a service (as used in the art)
2. Indicators: scalar (numerical) representations of states of computing components  
(per present specification, Page 1, Lines 17-23)
3. Indicator agents: process which determines particular indicators (per present specification, Page 1, Lines 17-23)
4. Domain: logical grouping of network computing nodes (per present specification, Page 4, Lines 11-12)
5. Configuration agent: process which creates indicator agents (per present specification, Page 10, Lines 15-26)

***Claim Rejections - 35 USC § 112***

14. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. Claim 15-22 and 24-35 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled

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in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

16. Specification of domains, construction/creation of configuration agents, creation of indicator agents, and indicator agent maintenance of a subscriber list [potentially] specifying other indicator agents, and specifics of deployment of indicators, are not sufficiently described in the present specification to allow one skilled in the art at the time of invention to make and use the invention as claimed. In short, the specification appears very abstract, and provides no specifics to allow one skilled in the art to make and use the invention as claimed without significant, and undue experimentation. Any and all specifics relating to the construction of objects, agents, and proxy agents, is completely omitted and presumed by Applicant as known. See, *inter alia*, specification, Page 6, Lines 7-8. One skilled in the art would be forced to undergo undue experimentation to perform many of the functions as claimed given the broad and non-specific definitions in the present specification.

1. Most importantly, the intended inventive step as argued by Applicant and disclosed in the specification is practically incomprehensible. See, *inter alia*, Page 7, Lines 3-31. The “managed subscriber list” is defined in the specification on Page 7, Lines 3-27, as associated with that particular indicator agent. Manipulation, construction, and reference of the list is performed using various recited functions. The specifics of the various “functions” utilized (i.e., `Subscribe()`, `Management Information()`, `Val()`, `Valp()`) are not expressly specified, and it is unclear what some of these functions even do. Thus, critical functional operation of the invention is unclear or missing. One of ordinary skill in the art would be forced to resort to undue experimentation to make or use the invention as claimed.



2. Other features evident in the dependent claims are also not described in sufficient detail to permit one skilled in the art to make and use the invention without undue experimentation. Claim 17 recites “analyzing a formula defining the indicator” where an indicator “characterizes the status or the operation of one or more resources of the computer system”. Claim 18 recites “resolving the names of objects referenced in a formula of the indicator and creating by the indicator deployment agent corresponding indicator agents by determining valid combinations of the values of the variables of said objects.” The specification does not provide any detailed description of “resolving” anything beyond a simplistic use of a naming service (Page 9). Further, “determining valid combinations of the values of the variable of said objects” is not a trivial task, and the specification never deals directly with how these functions may occur. Indeed, the specification never discloses how to process anything “smaller” than the “object” (i.e., addressing or considering sub-atomic elements of the atomic object) beyond arbitrary named functions which cannot be identified (i.e., I\_Deployer and I\_Indicator). Claim 20 attempts to further limit “the process for resolving the name” but never performs any step which actual progress this intention; claim 20 does not “resolve” names (resolving infers “translating” names into logical names or addresses for unique identification), it potentially creates agents associated with the deployment agents.

3. There is a question as to the enablement of the claimed invention without the requirement for positive recitation of the naming convention used to map the elements defining a domain to indicator agent(s). See, inter alia, present specification, Page 8, Lines 15-23. Lacking positive recitation of the naming service mechanism in the claims, the claimed invention can not be properly enabled. Functional use of domain mappings and particular agent(s) associated with

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the particular, arbitrary domains, and particular, arbitrary indicators, is required for operation of the invention. Thus, the naming convention, critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

17. Several sections of the specification are replete with contradictions, leading to almost incomprehensible description of critical system elements as claimed. For example, “An agent can be created in a remote server” (Page 5, Line 32) and “A ‘factory’ agent is present in all of the agent servers and is responsible for creating objects in the server[.] It makes it possible to manage the creation of remote agents.” (Page 6, Lines 7-8). If “a factory agent is present in [each] of the agent servers and is responsible for creating objects in the [agent] server”, it is unclear how remote server(s) could house these agents, since the agents would be local to the agent server.

18. The description as set forth is so vague and lacking in descriptive and functional language that one skilled in the art would be forced to undergo undue experimentation to make and use the invention as the artisan interpreted, since concrete definition of functional behavior and claimed analysis is missing. The specification reads as an abstract of an inventive process which is not clearly enough defined to permit one skilled in the art to make and use the invention as claimed. Lastly, the specification cannot reasonably enable what is broadly described in the abstract of the present application. Extensive discussion (on the record) about what it is the applicant thinks that s/he has invented is required to even define a basis for further patentability determinations.

19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 15-22 and 24-35 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

21. All the claims recite “determining a plurality of indicators to be deployed”, and “deploying the plurality of indicators”. It is submitted that these limitations should recite “deploying the plurality of indicator agents”, since values which define the current state of monitored network entities are not “deployed”, they are gathered, measured, determined, etc., by deployed indicator agents. Otherwise, the result is completely unclear, since an indicator agent must know what it is intended to measure (i.e., indicate), and agents cannot be reasonably deployed without knowing what function they are to serve. Deploying intended values to be measured must have already occurred, if agents have been deployed to measure them.

22. Claims 15 and 26 recite “each indicator agent managing a subscriber list on which an identification of at least one other indicator agent may be written” In Lines 12-13 of the claim. It is unclear whether this limitation is positively reciting anything which is further limiting. This limitation is broad enough to construe that no identifications constitute entries on the list, and whether of any other indicator agent(s) are actually on the list, or not. Indeed, if a subscriber list is present, ANY address identification is able to be on the list, including addresses which are non-interpretable. The claim(s) provide no useful and concrete functional behavior which results from this alleged entry on the subscriber list. The limitation may not be further limiting since any and all entries on this list are completely optional and arbitrary; none of the entries serve any purpose but to be on the list, and entries on the list are not required for the claimed invention.

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23. As touched on above in regard to 35 USC 112, first paragraph enablement, it is unclear why there is no recited naming service convention in the claims, since the specification dictates a mapping between “domains” and indicator agents. See, inter alia, present specification, Page 8, Lines 15-23.

24. Claim 16 recites “...for the indicator with which said deployment agent is associated”. There is lack of proper antecedence basis for “the indicator” in the claim, since no particular indicator has been express isolated; the indicators comprise the “plurality of indicators”, as claimed.

25. Some dependent claims (inter alia, claim 17) recite “analyzing a formula defining the indicator”. Since no particular indicator has been expressly defined, it is impossible to determine proper metes and bound of this limitation.

26. It is suggested positive, functional behavior be recite in the claims so the metes and bounds of the claims can be easily ascertained, and a definition of what it is the inventor seeks to patent is reasonably and clearly stated.

### ***Claim Rejections - 35 USC § 103***

27. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. §103(c) and potential 35 U.S.C. §102(f) or (g) prior art under 35 U.S.C. §103(a).

29. Claims 15-17, 19, 21-22, 24-28, 30, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (U.S. Patent Number 6,308,208), hereinafter referred to as Jung, in view of Turek et al. (U.S. Patent Number 6,460,070), hereinafter referred to as Turek, or alternatively, unpatentable over Turek in view of Jung.

30. Using the above definitions for claim terms, Examiner has concluded that the independent claims (i.e., 15 and 26) require determination of a set of variables (i.e., indicators) to dictate what is intended to be measured (i.e., indicated) at specified nodes, on a list, defining a given domain. Among these nodes on the list, processes are spawned/created/configured/etc., to determine the specified indicators on each node. The dependent claims range from arbitrary function call names to agent process generalizations.

31. Turek disclosed construction of software agents by selection or assembling one or more tasks. See, inter alia, Column 2, Lines 37-41, and Column 7, Lines 49-57. This agent is deployed to measure one or more “indicators” at the specified node(s). See, inter alia, Column 2, Lines 47-49. The disclosed gateways act to manage their own “domain” of nodes. See, inter alia, Column 4, Lines 50-58. The system is equipped to recognize and rectify myriad differing network conditions.

32. Jung provided very similar teachings, related again with network conditions and deployed agents. See, inter alia, Columns 1-2. Jung expressly disclosed the scalar measurement of “indicators” as claimed. See, inter alia, Column 2, Line 26 through Column 3, Line 6. The system acted to propagate determined values of network measured resources to other agents in

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the system for coordinated system management. See, inter alia, Column 3, Lines 2-6. This provided a mechanism for monitoring and managing an entire realm of system “indicators”. See, inter alia, Column 4, Lines 34-38. The system used atomic indicator agents which were capable of referencing each other, while having attributes indicating state (i.e., indicating agents, and indicators, as claimed). See, inter alia, Column 6, Line 63 through Column 7, Line 19. Also, the “cells” were completely customizable, equipped to perform any one or various sets of functions. See, inter alia, Column 7, Lines 10-19. Thus, the system operated to propagate changes and observed states to other autonomous agents for purely distributed management. Lastly, the use of multiple agents (i.e., the use of concurrently operating/executing cells and maintenance of cell states) was likewise evident. See, inter alia, Column 7, Lines 32-61.

33. The combination of these teachings was not challenged by Applicant. This makes sense, since the inventions are subcombination usable together on the same system. Note Figures 1, both Patents. The resulting systems provided a system operating to configure and deploy operating agents to specified domains which resulted in logical arrangements of monitored “indicators”.

34. Claims 15-17, 19, 21-22, 24-28, 30, and 32-35 are rejected.

### ***Response to Arguments***

35. The arguments presented by Applicant in the response, received on 10/14/2005, are not considered persuasive.

36. Applicant argues the prior art of record did not disclose or suggest creating an agent for each of the resources to be monitored. See, inter alia, Page 10, Lines 8-10. Applicant further

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asserts failure of the art to disclose evaluation of each of a set of given indicators. It is noted that the agents disclosed by the prior art are atomic, and concurrent deployment of multiple agents at the same time was reasonable and expected. Thus, the provision for multiple agents being deployed to the same domain for the purpose of “indicating” differing things; the provision for different, distinct resources results in the deployment of differing, distinct agents.

37. Applicant appears to construe the prior art of record being limited to only a single agent per node. It is noted that the prior art was not limited to the centralized agent selection and deployment system as characterized by Applicant (e.g., see response, Page 10-11, discussion of Turek). See, *inter alia*, Turek, Column 5, Lines 33-37. Further, selection, construction, and deployment of an agent for a particular purpose (or a set of purposes) does not preclude the distribution of separate agents to given node atomically; that is, sending one large, complicated agent is logically equivalent to sending multiple “smaller” agents.

38. Applicant's arguments may fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant has amended the claims to include functionality requiring management of subscriber list(s) which may include other indicator agents, but has failed to discuss this feature of the invention at all, and has failed to disclose how it is the prior art fails to disclose this feature.

39. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combined system of Turek

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and Jung clearly provided the provision for multiple agents measuring multiple indicators, as discussed above.

***Conclusion***

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc D. Thompson whose telephone number is 571-272-3932. The examiner can normally be reached on Monday-Friday, 9am-4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn, Jr., can be reached at 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned has recently changed, and is now 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARC D. THOMPSON  
**MARC THOMPSON**  
PRIMARY EXAMINER

Marc D. Thompson  
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Art Unit 2144